## WaterSMART Cooperative Watershed Management Program Planning Grant Proposal



Establishment of a New Watershed Group to Foster Collaboration, Trust, Outreach, Planning, and Solutions in the Salt River Watershed in Northwest Wyoming and Southeast Idaho



Applicant and Project Manager: Leslie Steen Trout Unlimited NW Wyoming Program Director PO Box 5002 Jackson, WY 83001 leslie.steen@tu.org 307-699-1022

# Table of Contents

1. Executive Summary	1
2. Project Location	2
3. Technical Project Description	3
3.1 Applicant Category	3
3.2 Eligibility of Applicant	3
3.3 Goals	4
3.4 Approach	5
4. Evaluation Criteria	6
4.1 Evaluation Criterion A—Watershed Group Diversity & Geographic Scope (30 points)	5
4.1.1 Sub-criterion No. A1. Watershed Group Diversity	6
4.1.2 Sub-criterion No. A2. Geographic Scope	8
4.2 Evaluation Criterion B—Addressing Critical Watershed Needs (35 points)	1
4.2.1 Sub-criterion No. B1. Critical Watershed Needs or Issues	1
4.2.2 Sub-criterion No. B2. Developing Strategies to Address Critical Watershed Needs or	
Issues	8
4.3 Evaluation Criterion C—Implementation & Results (25 points) 19	9
4.3.1 Sub-criterion No. C1—Project Implementation	9
4.3.2 Sub-criterion No. C2—Building on Relevant Federal, State, or Regional Planning Efforts	s 2
4.4 Evaluation Criterion D—Department of the Interior & Bureau of Reclamation Priorities (10 points)	4
5. Project Budget	6
5.1 Budget Proposal	6
5.2 Budget Narrative	7
6. Environmental & Cultural Resources Compliance	8
7. Required Permits or Approvals	8
8. Letters of Support	8
9. Official Resolution	9
Appendix A: Letters of Support	С

### 1. Executive Summary

The executive summary should include:

- The date, applicant name, city, county, and state.
- A one paragraph project summary that identifies the location of the watershed area in which the group will work, provide a brief description of the activities that will be carried out, any partners involved, watershed concerns in the watershed area, area and how the activities completed through this grant are expected to help alleviate impacts of those conditions. This information will be used to create a summary of your project for our website if the project is selected for funding.

Date: 19 January 2021

Applicant Name: Trout Unlimited City, County, and State: Afton, Lincoln County, Wyoming Length of Time: Two years beginning August 1, 2021 Estimated Completion Date: July 31, 2023

Trout Unlimited (TU) and partners seek to establish a new watershed group in the Salt River watershed, the Salt River Watershed Group (SRWG), located in northwest Wyoming and southeast Idaho. The watershed includes Star Valley, the fastest-growing area in Wyoming. The Salt River watershed also includes a significant amount of Federal lands - primarily National Forest lands (Bridger-Teton and Caribou-Targhee National Forests) with a small amount of Bureau of Land Management and Bureau of Reclamation lands. Since launching the Snake River Headwaters Initiative in 2016, TU has worked with agencies, nonprofits, and private landowners in the upper Snake and Salt River watersheds to identify priorities, research needs, and future projects in these basins. Through conversations with key stakeholders and partners stemming from multiagency coordination meetings, it is apparent that there is a need for establishing a formal watershed group specifically focused on the Salt River watershed. The group will identify and address issues unique to the watershed and the communities it encompasses. TU will engage a diverse group of stakeholders to participate in the newly established Salt River Watershed Group, including federal and state land, resource, fish and wildlife, and water management agencies, conservation districts, county and municipal governments, irrigation districts, mines, nonprofit organizations, utilities, and community groups and members. The newly established watershed group will identify and prioritize major watershed concerns, including (but not limited to): degraded water quality; impacts of development; aquatic, riparian and wetland habitat degradation and loss; loss of stream function; bank and channel instability; and water quantity, dewatering, and lowered water tables. To lay the groundwork for a thriving watershed group in the Salt River, grant funding will support organizational development, stakeholder and community outreach, background research, and pre-planning for a future stakeholder-driven watershed restoration plan.

The proposed watershed group will be located in the Salt River watershed, which includes a significant amount of Federal lands – primarily National Forest lands (Bridger-Teton and Caribou-Targhee National Forests) with a small amount of Bureau of Land Management and Bureau of Reclamation lands.

## 2. Project Location

Provide specific information on the geographic location of the area in which the watershed group will work including a map showing the geographic location.

The watershed drains the Salt River Range to the east and the Caribou Range to the west, with its headwaters in the Bridger-Teton National Forest south of Smoot, Wyoming, and its terminus at the confluence of the Salt, Snake, and Greys Rivers at the Palisades Reservoir outside of Alpine, Wyoming. Palisades is a major storage reservoir of the Bureau of Reclamation's Upper Snake River Basin in the Columbia-Pacific Northwest Region.



## 3. Technical Project Description

### 3.1 Applicant Category

Please indicate whether you are seeking funding as a New or Existing Watershed Group and explain why you chose to apply under that Applicant Category. As part of this discussion, please provide a brief history of the group, including discussion of: (1) when and how the group was initiated, and (2) ongoing projects or efforts (e.g., previous watershed planning activities).

Trout Unlimited (TU) is applying for grant funding to establish a New Watershed Group, the Salt River Watershed Group (SRWG), in northwest Wyoming and southeast Idaho. TU is applying under this category because no established watershed group currently exists for the Salt River.

TU has worked in the Salt River watershed since 2010 and completed an assessment of irrigation diversions throughout the watershed, a study of entrainment caused by a major irrigation system, and several on-the-ground projects to improve fish passage and connectivity. In 2016, TU launched the Snake River Headwaters Home Rivers Initiative (the Initiative), an ambitious effort to restore and protect the headwaters of the Snake River, including the Salt River watershed, and its fishery through partnerships with communities, landowners, agency partners, and other stakeholders. Since 2016, TU has cultivated partnerships throughout the drainage and implemented two large-scale, multi-year restoration projects on Tincup Creek and Swift Creek, tributaries to the Salt River.

Since 2018, TU has also led an Upper Snake/Salt Multiagency Project Coordination Meeting attended by the Bridger-Teton National Forest, Caribou-Targhee National Forest, Grand Teton National Park, Jackson Hole Trout Unlimited Chapter, Natural Resources Conservation Service, Protect Our Water Jackson Hole, Star Valley Trout Unlimited Chapter, Snake River Fund, Star Valley Conservation District, Teton Conservation District, United States Geological Survey, and Wyoming Game and Fish Department. The purpose of the annual meeting is to encourage collaboration and communication among agency partners, with an emphasis on fisheries and aquatic projects, as well as research and monitoring related to projects. Through these annual meetings, participants identified the need for a dedicated group focused specifically on the Salt River watershed.

The relationships built through both the Initiative and the Upper Snake/Salt Multiagency Project Coordination Meetings have created a foundation to build the new Salt River Watershed Group. With the assistance of the Bureau of Reclamation's WaterSMART Cooperative Watershed Management Planning (CWMP) Grant, TU and partners will realize this vision of a comprehensive watershed group based in the Salt River watershed with the knowledge, expertise, and diversity to improve and protect watershed health and resiliency into the future.

#### 3.2 Eligibility of Applicant

Please write a narrative summary indicating how the applicant meets the eligibility requirements, as described in *Section C.1. Eligible Applicants*. Please include an explanation of the applicant's role in the New or Existing Watershed Group.

TU is the nation's largest grassroots coldwater conservation organization with a mission to conserve, protect, and restore North America's trout and salmon fisheries and their watersheds. TU works to achieve this mission on a local, state, and national level through an extensive volunteer network and dedicated staff. Headquartered outside of Washington, D.C., TU is a 501c(3) nonprofit organization founded in 1959 that currently has approximately 258 staff working in 36 offices from Alaska to North Carolina. TU has extensive federal grant management experience, and currently manages over 300 different federal grants, including numerous grants in partnership with the Bureau of Reclamation.

TU has been involved in several watershed groups recently supported by CWMP grant funding, including the Blue River Watershed Group in Colorado, the Bitter Root Water Forum in Montana, the Sun River Watershed Group in Montana, and the Willwood Working Group #3 in Wyoming, and is therefore well-positioned to be the lead applicant on the current proposal. Additionally, TU works on the ground in communities throughout the West, finding collaborative solutions to the twenty-first-century challenges of drought, habitat loss, and aging infrastructure by convening diverse stakeholders in pursuit of shared goals. In the Yakima River Basin, for example, TU has partnered with the Kittitas Reclamation District to help create a national model for restoring streams by using existing infrastructure and modernizing water delivery system parts to maximize efficiency and increase flows to key salmon and steelhead tributaries. In the Henrys Fork River watershed of southwestern Wyoming and northeastern Utah, TU has built relationships with NRCS staff and local landowners to implement instream restoration and irrigation efficiency projects throughout the watershed.

TU is prepared to administer the CWMP grant and use a portion of the funding to increase TU staff capacity in the Salt River watershed. Additional TU capacity is essential for initial organization, solicitation, and development of a watershed group, as well as increased and sustained momentum for local partnerships and project identification. TU's standing in the watershed from previous project work, multi-agency working groups, and community connections provided by the Star Valley TU chapter ensures our capability of promoting the sustainable use of water resources in the watershed.

#### 3.3 Goals

Discuss the preliminary goals and objectives of the New or Existing Watershed Group.

The preliminary goals and objectives of the Salt River Watershed Group will be to:

- 1. Establish a new watershed group in the Salt River Watershed in northwest Wyoming and southeast Idaho, including federal and state agencies; county and municipalities; nonprofits; irrigation districts and water users; agricultural producers; recreational outfitters and guides; utility providers; mining; and interested community members.
- 2. Build trust in the Star Valley and surrounding communities through a robust outreach and communications plan that includes leveraging stakeholder involvement and providing information on watershed health, watershed issues and concerns, and partnership projects.
- 3. Research watershed needs and issues in preparation for the development of a future watershed restoration plan.

4. Increase TU capacity in the Salt River watershed to solicit participation in SRWG and identify partnerships and priorities for restoration project implementation.

#### 3.4 Approach

Provide a more comprehensive description of your planned approach for completing watershed group development, restoration planning, and watershed management project design activities. Please identify which of the Task Areas described in *Section C.3.1. Eligible Projects* you will address as part of this project, including a detailed discussion of what activities you will undertake within each Task Area.

TU is applying for this CWMP Phase I funding opportunity as a New Watershed Group and will be undertaking activities under **Task A - Watershed Group Development**. These proposed activities align with the goals outlined above and will help TU build a Salt River Watershed Group that is representative of the diverse stakeholders in the Salt River watershed and that will be responsive to the watershed concerns identified through this process.

TU has identified four main activities for the development of the Salt River Watershed Group: *Activity 1: Organizational development* 

- Hire a part-time watershed coordinator. TU proposes that the new Salt River Watershed Group and Coordinator be based in Afton, Wyoming or one of the main population centers in Star Valley, Wyoming, with the position's geographic scope including both the Wyoming and Idaho portions of the watershed.
- Research successful watershed groups' organizational structures.
- Develop a mission statement, vision statement, and goals.

#### Activity 2: Stakeholder and community outreach

- Create a communications and outreach plan which will include but is not limited to:
  - Setting up a domain and website for SRWG.
  - Creating marketing and outreach materials including business cards, brochures, stickers, and signage.
  - Developing an ArcGIS Story Map that will provide public information about the Salt River watershed, SWRG, watershed concerns, and, eventually, potential projects identified through watershed planning and stakeholder involvement.
- Establish a community presence which will include but is not limited to:
  - Attending community events to promote SRWG.
  - Planning a river cleanup with Star Valley TU to raise awareness about SRWG.
  - Booking advertising in the *Star Valley Independent* and/or *Buckrail* to promote SRWG and quarterly meetings.
- Conduct stakeholder outreach which will include but is not limited to:
  - Meeting with interested stakeholders to provide information about SRWG and ensure membership is diverse and representative of watershed demographics.
  - Hosting tours of recent partnership projects in the watershed for interested stakeholders and community members.
- Coordinate regular SRWG meetings which will include but is not limited to:
  - Scheduling and organizing quarterly SRWG meetings.

- Facilitating SRWG meetings.
- Disseminating agendas, notes, and information for SRWG meetings.

#### Activity 3: Background research and stakeholder interviews

- Background research actions will include but are not limited to:
  - Researching relevant federal, state, and local planning efforts and plans.
  - Researching examples of other watershed restoration plans.
  - Identifying other planning efforts that may complement a future Bureau of Reclamation-supported, stakeholder-driven watershed restoration plan.
  - Compiling information gathered through research efforts and making these findings accessible to stakeholders.
- Stakeholder interview actions will include but are not limited to:
  - Conducting stakeholder interviews to better understand watershed concerns, needs, and issues.
  - Organizing and attending on-site visits with stakeholders to observe, understand, and document watershed concerns, needs, and issues.

#### Activity 4: Pre-planning for a future stakeholder-driven watershed restoration plan

- Once SRWG is established, identify desired elements of a future watershed restoration plan based on background research, stakeholder interviews, and community outreach.
- Compile information about watershed concerns, needs, and issues, including photos and GIS coordinates to populate Story Map.
- Identify additional research needed and contractor requirements for a future watershed restoration plan and begin to develop an action plan and budget.

## 4. Evaluation Criteria

#### 4.1 Evaluation Criterion A—Watershed Group Diversity & Geographic Scope (30 points)

#### 4.1.1 Sub-criterion No. A1. Watershed Group Diversity

Points shall be awarded to proposals based on the extent to which they encourage collaboration with a diverse array of stakeholders across the watershed. Please describe the efforts that you will undertake to ensure that the watershed group will include a diverse array of stakeholders, including outreach to stakeholders or collaborating with other groups or partners. If the watershed itself does not include a diverse set of interests and sectors, please provide an explanation of this also. In responding to this sub-criterion, please include:

- A description of the stakeholders within the watershed that affect or are affected by the quantity or quality of water within the watershed ("affected stakeholders").
- For New Watershed Groups, a description of the affected stakeholders within the watershed that support the formation of watershed group. To the extent possible, please identify the specific stakeholders or groups that support the formation of the watershed group, describe their interest in the watershed, and reference any letters of support or pledges/donations from affected stakeholders.
- Details on how you plan to target affected stakeholders to ensure that your group will represent a diverse set of stakeholders within the watershed, such as engaging in outreach to include new members, or collaborating with different groups or partners (e.g., outreach

or partnership activities, public meetings, newsletters, marketing materials, or recruitment of new members).

• Any other support demonstrating that the watershed group will include a diverse membership.

#### Affected Stakeholders & Support for the Salt River Watershed Group

TU and project partners plan to represent the full geographic scope of the Salt River watershed. Please see the map on p. 2 for land ownerships. The upper elevation extents of the watershed are primarily composed of Bridger-Teton and Caribou-Targhee National Forest lands. Employees of these agencies have already expressed an interest in joining SRWG.

The lower elevations of the watershed are primarily composed of private lands in Star Valley with a more varied and diverse list of affected stakeholders, including federal and state agencies, conservation districts, county and municipal governments, irrigation districts, mines, nonprofit organizations, utilities, and community groups and members. TU has identified the following list of potential SRWG members that will ensure full representation of the geographic scope of the area. TU will work with this group to establish a process to identify and invite additional stakeholders.

Please note that tribal groups have not been included because there are no known tribal interests in the watershed. If tribal interests are identified in the research and organizational process, the Salt River Watershed Group will engage with the tribe(s) and incorporate their needs, ideas, and goals into SRWG's work.

ENTITY	SECTOR
Trout Unlimited—project applicant and	Environmental Conservation
watershed group coordinator	
Cottonwood Irrigation District	Agriculture
Dry Creek Irrigation District	Agriculture
Landowners/Residents	Community Members
Local Guides and Outfitters	Recreation/Tourism
Star Valley Trout Unlimited	Environmental Conservation/Recreation
Jackson Hole Land Trust	Environmental Conservation
Legacy Works Group	NGO
Lower Valley Energy	Local Utility
Lincoln County Planning Office	Local Government
Star Valley Chamber of Commerce	Local Government
Star Valley Conservation District	Local Government
Town of Afton	Local Government
Town of Alpine	Local Government
Town of Star Valley Ranch	Local Government
Town of Thayne	Local Government

Bolded organizations have expressed an interest in being involved in SRWG. Italicized groups have submitted letters of support; these letters are included in Appendix A (p. 30).

Idaho Department of Environmental Quality	State Agency
Idaho Department of Fish and Game	State Agency
Wyoming Department of Environmental	State Agency
Quality	
Wyoming Game & Fish Department	State Agency
Wyoming State Engineer's Office	State Agency
Wyoming Water Development Office	State Agency
Bridger-Teton National Forest	Federal Agency
Bureau of Reclamation	Federal Agency
Caribou-Targhee National Forest	Federal Agency
Natural Resources Conservation Service	Federal Agency
U.S. Fish & Wildlife Service Partners for	Federal Agency
Fish & Wildlife Program	
Itafos Mine	Mining
J.R. Simplot Mine	Mining

#### **Targeted Outreach**

TU and SRWG will target outreach to the listed groups who have not already been contacted and will seek input from additional stakeholders who are interested in and affected by watershed concerns and SRWG activity. Several of the listed entities that have already expressed an interest in joining SRWG have offices and a presence in the Star Valley to assist the group in targeting additional members through outreach.

In addition to targeting additional stakeholders, SRWG will also develop a communications and outreach plan to promote involvement from the community, recruit additional stakeholders, and provide information. This plan will involve creating a website and marketing materials such as brochures, business cards, stickers, and signage, as well as developing a platform on the website for an ArcGIS Story Map that will provide information about the Salt River watershed and STWG in a compelling and interactive format.

In addition, TU and SRWG will conduct further stakeholder engagement by establishing a community presence through attending local events, hosting a river clean up, and advertising in local publications. TU will follow up with interested contacts after events, and will reach out to potential members, through personal emails and/or phone calls. Quarterly SRWG meetings will be open to any interested stakeholder and sign-in/contact sheets will be used to take attendance and follow up with those who attended the meeting. The group will also conduct stakeholder interviews and on-site visits to observe, understand, and document watershed concerns, needs, and issues.

#### 4.1.2 Sub-criterion No. A2. Geographic Scope

Please provide the following information in response to this sub-criterion:

- Provide a map illustrating the geographic boundaries of the area in which the watershed group will work.
- The map should also identify the location or boundaries of the stakeholder groups within the area and indicate which stakeholders are currently involved in the group and which will

be targeted through outreach. If a map of stakeholder location cannot be provided, please describe the geographic scope of the area to the best of your knowledge.

- Describe the extent to which the planned membership of the watershed group will represent the full geographic scope of the area in which the group intends to work. If applicable, describe the extent to which the watershed group already represents the geographic scope of the area.
- Describe the efforts that you will undertake to ensure that the watershed group will target stakeholders that represent the full geographic scope of the area in which the watershed group will work.



The Salt River watershed, located in northwest Wyoming and southeast Idaho, is a headwaters tributary of the Snake River with Hydrologic Unit Code 17040105. The mainstem river flows from south to north for 84 miles through the Star Valley in Wyoming. The watershed drains an area of 592,538 acres (890 square miles), with approximately 55% in Wyoming (Lincoln County) and 45% in Idaho (Caribou and Bonneville Counties), and is located about 70 miles southeast of Idaho Falls, ID. For a larger version of this map, please see p.  $2.^{1}$ 

The watershed drains the Salt River Range to the east and the Caribou Range to the west, with its headwaters initiating on the Bridger-Teton National Forest south of Smoot, Wyoming, and its terminus at the confluence of the Salt, Snake, and Greys Rivers at the Palisades Reservoir outside of Alpine,

Wyoming. Palisades is a major storage reservoir of the Bureau of Reclamation's Upper Snake River Basin in the Columbia-Pacific Northwest Region.

<sup>&</sup>lt;sup>1</sup> Sources for this section: Tetra Tech, Inc., "Salt River Watershed, Wyoming Water Quality Assessment and *E. coli* TMDLs" (Wyoming Department of Environmental Quality, 30 June 2015); "The Bank of Star Valley Star Valley Economic and Demographic Review" (Bank of Star Valley, August 2020); "Salt River Watershed Plan," (Afton, WY: Star Valley Conservation District, 2005).

Land ownership in the valley bottom of the watershed is primarily private, composing 29% of the total land area, while land ownership in the more mountainous, upper-elevation portions of the watershed is primarily federal U.S. Forest Service lands (Bridger-Teton and Caribou-Targhee National Forests), composing 68.4% of the total land area. The remainder of the land ownership is composed of federal U.S. Bureau of Land Management (1.4%), federal U.S. Bureau of Reclamation (0.1%), and state of Wyoming (1.0%) lands. Elevations range from 10,709 feet at its highest to 5,630 feet at its lowest (at Palisades Reservoir). A natural constriction in the valley known as the "Narrows," located between the towns of Afton and Thayne, divides the watershed into the "Upper Valley" to the south and "Lower Valley" to the north.

The main tributaries draining the eastern side of the watershed from the Salt River Range are Cottonwood Creek, Dry Creek, Swift Creek, Willow Creek, Strawberry Creek, and Cedar Creek. These streams are high gradient streams with alluvial fans extending into the valley and cold water temperatures. The main tributaries draining the western side of the watershed from the Caribou Range are Spring Creek, Crow Creek, Stump Creek, Tincup Creek, and Jackknife Creek. These are typically longer and lower gradient than the eastside tributaries. In the valley bottom, there are numerous springs and sloughs, some of which are influenced by irrigation water dynamics.

Located in the northern part of Lincoln County, Star Valley is recognized as the fastest growing part of Wyoming, with an estimated growth rate of 4.5% (versus 2.9% for Lincoln County and 0.2% for the state of Wyoming) and population base of 13,776 (19,830 total in Lincoln County). Incorporated towns include Afton, Alpine, Star Valley Ranch, and Thayne. Unincorporated towns include the communities of Auburn, Bedford, Etna, Fairview, Freedom, Grover, and Smoot.

Major water uses in the watershed include agricultural irrigation, water storage at Palisades Reservoir, municipal and domestic water, stock water, recreation, fish and wildlife habitat, and hydropower. Prior to Anglo American settlement, the Shoshone people hunted, fished, and gathered native plants and roots in the region from time immemorial. Since settlement by homesteaders in the late 1800s, Star Valley has been characterized by agricultural activity and irrigated land for nearly the past century and a half, with approximately 65,000 acres of land in the watershed irrigated primarily by surface water sources to support hay and grain production and livestock. In recent years, the valley has experienced rapid growth, rapidly increasing development pressure, and changing land use as a desirable location for retirees and a bedroom community for workers commuting to nearby Jackson, Wyoming.

In addition to Palisades Reservoir, which is a Bureau of Reclamation water storage and hydropower reservoir, Lower Valley Energy produces green power from two "low-impact" hydropower facilities on Strawberry Creek in Bedford, Wyoming and Swift Creek in Afton, Wyoming. The 48-mile section of the Salt River downstream of Afton is a celebrated recreational resource with multiple public access points, is considered a blue ribbon trout stream by the Wyoming Game and Fish Department, and is a stronghold for native Snake River cutthroat trout, bluehead suckers, and other native fish, as well as brown trout. Above Afton, the Salt River is chronically dewatered during the irrigation season as a result of a combination of underlying geology and human alterations including water withdrawals for irrigation, channelization, and other stream manipulations. The planned membership of SRWG will represent the full geographic scope of the Salt River watershed, as described above, by engaging with all affected stakeholders from federal agencies to private landowners. The efforts TU and SRWG will undertake to ensure that the watershed group will target stakeholders that represent the full geographic scope of the Salt River watershed are described in Section 3.4, Approach, on p. 5 and Section 4.1.1, Subcriterion No. A1 – Watershed Group Diversity, on p. 6.

#### 4.2 Evaluation Criterion B—Addressing Critical Watershed Needs (35 points) 4.2.1 Sub-criterion No. B1. Critical Watershed Needs or Issues

Please describe in detail the critical issues or needs occurring within the watershed including, for example: declining ecological resiliency, water shortages, flooding, structural impairments, water supply, water quality issues (e.g., addressing Total Maximum Daily Loads, or targeting high priority activities in your state's "Measure W" watersheds), endangered species issues, conflicts over water supply, and other related issues faced by affected stakeholders. Endangered species issues may focus on, but are not limited to, activities prioritized by resource agencies such as National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA-NMFS) or U.S. Fish and Wildlife Service (USFWS), and appropriate state natural resource agencies.

A primary goal of this current proposal to establish a new watershed group for the Salt River is to identify major issues in the watershed (also discussed in more detail in Evaluation Criterion B – Addressing Critical Watershed Needs) with the help of engaged stakeholders. Initial conversations with partners involved to date have identified the following issues:

#### a. Water Quality

*E. coli*: A 7.5-mile section of the Salt River and the section of Stump Creek from the Idaho border to the Salt River confluence has a current Wyoming Department of Environmental Quality impaired listing for *E. coli*. This common bacterium is found in the digestive tract of mammals and is often present, along with other pathogens, in waterways in rural and agricultural areas due to the higher prevalence of septic systems and livestock manure. *E. coli*, ingested through recreational activities like swimming and fishing, can cause gastrointestinal distress as well as fever in humans and its presence is a useful indicator of overall water quality including the presence of other harmful bacteria.<sup>2</sup> The Wyoming DEQ Total Maximum Daily Loads and implementation plan for the Salt River outline tools and best management practices (BMPs) for restoring water quality, including addressing human, recreation, livestock, and pet sources to reduce overall pollution loads.

<sup>2</sup> Channah Rock & Berenise Rivera, "Water Quality, *E. coli*, and Your Health," College of Agriculture and Life Sciences, The University of Arizona, March 2014, accessed 15 January 2021, <u>https://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1624.pdf</u>; "Major Types of Nonpoint Source Pollutants," Indiana Department of Environmental Management, accessed 15 January 2021, <u>https://www.in.gov/idem/nps/2479.htm</u>



Figure 1: Grazing is one of the several known contributors of E. coli into the Salt River watershed.

*Sediment, temperature, and nutrients:* Sediment is a common pollutant in waterways, where it can harm fish and their habitat, alter stream hydrology, impair recreation, and be difficult to manage at water treatment plants.<sup>3</sup> TU and partners believe, based on observed sediment transport issues and associated bank and channel instability in the Salt River, that sediment levels in the watershed likely do not meet water quality standards. In addition, several major Salt River tributaries originating in Idaho and flowing into the Salt River in Wyoming have been identified as impaired for sediment by the Idaho Department of Environmental Quality. Therefore, sediment is a likely watershed concern that will warrant more investigation and discussion SRWG. Several of the tools and BMPs that address *E. coli* pollution may also improve sedimentation.

Anecdotally, local anglers indicate that stream temperatures in the late summer and early fall in certain areas of the watershed may be too high for coldwater-dependent fish species like trout. Increased water temperatures stress fish and other aquatic species by decreasing the amount of available oxygen in the water. Trout prefer cold water, often less than 65°F, and stream temperature has a strong influence on their well-being.<sup>4</sup> Such temperature changes in the Salt River may have been caused by past land use conversion to agriculture, which reduced riparian shading and cover, and other more recent human alterations to stream function and hydrology.

https://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1624.pdf; "Major Types of Nonpoint Source Pollutants," Indiana Department of Environmental Management, accessed 15 January 2021, https://www.in.gov/idem/nps/2479.htm

<sup>4</sup> "Stream Temperature Monitoring," Trout Unlimited, accessed 15 January 2021, <u>https://www.tu.org/science/science-engagement/community-science/stream-temperature-monitoring-</u> resources/#:~:text=Trout%20prefer%20cold%20water%2C%20often,influence%20on%20their%20well%2Dbeing.

<sup>&</sup>lt;sup>3</sup> Channah Rock & Berenise Rivera, "Water Quality, *E. coli*, and Your Health," College of Agriculture and Life Sciences, The University of Arizona, March 2014, accessed 15 January 2021,

SRWG would likely seek to investigate stream temperatures throughout the watershed, potentially through a citizen-science led temperature monitoring program. TU restoration projects often target improving stream temperatures and keeping a record of temperature variability and trends can be an important tool to help confirm the success of these efforts or identify where further work is needed.

High levels of nutrients fuel aquatic plant and algal growth in waterbodies; when this vegetation dies and decays it decreases the available oxygen in the water thus harming fish and other aquatic organisms.<sup>5</sup> Nutrient pollution in the form of elevated nitrogen and phosphorus levels are known to be a growing cause of concern in the upper Snake River watershed in Wyoming, in the Jackson Hole area. As recently as summer 2020, a potentially toxic bloom of cyanobacteria or blue-green algae in the Palisades Reservoir was investigated by the Idaho Department of Environmental Quality. Septic systems and agricultural and grazing runoff are known contributors of nutrient pollution to watersheds, and may be an issue in the Salt River watershed as well.

*Selenium presence from mining:* Elevated selenium levels in waterways cause deformities in fish and other animals and excess selenium in drinking water can lead to adverse physiological effects in humans.<sup>6</sup> Treated water from the Simplot Smoky Canyon phosphate mine in southeast Idaho discharges into Sage Creek and Crow Creek in the upper Salt River watershed. Selenium concentrations in these streams and in tissue samples of trout are being monitored by local private landowners and other groups to observe and document levels and identify if an ongoing issue exists.

#### b. Development

Star Valley is the fastest growing part of the fastest growing county, Lincoln County, in Wyoming. Growth has been attributed to being an attractive area for retirees and those relocating from other parts of the country, as well as a booming bedroom community of workers that commute to the resort community of Jackson Hole, Wyoming. The Salt River is a recreational amenity that has seen increased development within the floodplain and riparian corridor and will continue to see this development pressure. As new subdivisions and homes are built within the floodplain, particularly if they are built close to the river's banks and involve clearing of riparian vegetation, they are likely to necessitate future flood protection and bank stabilization measures like diking and riprap that impair stream function and watershed resiliency.

<sup>&</sup>lt;sup>5</sup> Channah Rock & Berenise Rivera, "Water Quality, *E. coli*, and Your Health," College of Agriculture and Life Sciences, The University of Arizona, March 2014, accessed 15 January 2021,

https://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1624.pdf; "Major Types of Nonpoint Source Pollutants," Indiana Department of Environmental Management, accessed 15 January 2021, https://www.in.gov/idem/nps/2479.htm

<sup>&</sup>lt;sup>6</sup> Chole Williams, "From Canadian Coal Mines, Toxic Pollution that Knows No Borders," Yale Environment 360, 1 April 2019, accessed 15 January 2021, <u>https://e360.yale.edu/features/from-canadian-coal-mines-toxic-pollution-that-knows-no-borders</u>



Figure 2: A property with cabins that recently changed ownership in 2020 used to have mature willows and riparian vegetation protecting and stabilizing banks. The new owners cleared all of the riparian vegetation. It is expected that this location on an outside bend of the river is likely to experience bank instability, erosion, and land loss in the future.

In addition, past land use activities converted the Salt River floodplain and riparian corridor from a cottonwood and willow-lined system to irrigated pasture lands. Grassland and herbaceous species, hay, and other cultivated crops commonly found along the Salt River corridor do not provide as robust protection from bank erosion, or fish and aquatic habitat benefits, as would have been found historically.

#### c. Aquatic, riparian, and wetland habitat degradation and loss

The Wyoming Game and Fish Department's (WGFD) Statewide Habitat Plan considers the Salt River corridor to be a "restoration habitat area," meaning it is an "important aquatic and/or terrestrial wildlife habitat that can and should be actively restored to achieve greater wildlife value." It considers the Salt River to be a blue ribbon trout stream fishery and a stronghold for native Snake River cutthroat trout in the 48-mile stretch downstream from the town of Afton to Palisades Reservoir. Snake River cutthroat trout, which the WGFD manages as a distinct subspecies of Yellowstone cutthroat trout, is the only subspecies of cutthroat trout that still dominates in its native range and is therefore of high conservation priority for watershed group members that manage and conserve native aquatic species. The Salt River is also important habitat for bluehead suckers, a Wyoming Species of Greatest Conservation Need.

The WGFD recognizes the Salt River as an important resource as the cultural, economic, and recreation hub for the Star Valley community. It manages a number of public access sites for fishing and boating along the Salt River. It has identified that watershed degradation exists as a result of human development and land management, with the most pronounced symptom of these impairments being extreme bank erosion and land loss throughout the river corridor. Loss of riparian function, loss of wetlands, channel straightening, dredging, and flood control have reduced the river's ability to route sediment and maintain vital instream and riparian habitats, which in turn has impacted habitat for native fish as well as nonnative sport fish like brown trout.



Figure 3: Native "fine-spotted" cutthroat trout rescued during annual fish salvage from the Eastside Canal near Thayne, WY.

Figure 4: Brown trout rescued from the Eastside Canal.

Similarly, TU has been working in the Salt River watershed since 2010 in recognition of both its importance as a native Snake River cutthroat trout stronghold and as an area in need of restoration and thoughtful planning. TU completed an assessment of fish passage barriers in the watershed in 2012. This study was important because protecting existing and restoring access to spawning and rearing habitat is vital to the future persistence of Yellowstone and Snake River cutthroat trout in the Salt River watershed. Ensuring appropriate access and habitat is especially important because the majority of spawning in the Salt River occurs in the relatively few mountain tributaries that are connected to the mainstem, as well as restored spring creeks, and is otherwise limited as many eastside tributaries to the Salt River are disconnected as a result of irrigation dams, ditches, or dewatering.



Figure 5: A log and plywood dam used for irrigation impairs stream function and proper routing of sediment and is a likely barrier to upstream fish passage.

TU has worked on several partnership projects within the watershed including on the Salt River mainstem at the Eastside Canal diversion, Crow Creek, lower Tincup Creek, upper Tincup

Creek, and Swift Creek. These projects have built relationships with agency partners and private landowners in the Star Valley and laid the groundwork for the current proposal and formation of a new Salt River Watershed Group. Several of these projects, which include multiple benefits and techniques including fish passage and fish habitat improvement, bank and channel stabilization, sediment reduction, riparian revegetation, riparian fencing, and stream restoration, are visible demonstration projects that could be used as part of the outreach and communications associated with SRWG.

#### d. Loss of stream function

As mentioned above, there are several watershed issues that contribute to an overall loss of stream function within the Salt River watershed. The most visible impacts are high bank and channel instability and the resulting erosion, sedimentation, and land loss, which are in turn interrelated with human impacts from development and land management, impaired water quality, and degraded aquatic, wetland, and riparian habitat. Restoration projects that simultaneously benefit the ecosystem, landowners, and public resources are likely to be part of a future watershed restoration plan.



Figure 6: Vertical, eroding banks located on outside bends contribute sediment and E. coli to the Salt River watershed and are a result of past land management activities such as grazing history and removal of riparian vegetation.



Figure 7: Stream restoration techniques that increase floodplain connectivity, stream and bank stability, and riparian vegetation such as those being used on the Lower Swift Creek Restoration and Stabilization Project result in multiple watershed benefits.

#### e. Water availability and dewatering

Below the town of Smoot and above the Town of Afton, the mainstem of the Salt River is seasonally dewatered following spring runoff (Figure 8). This is likely a result of a combination of natural hydrologic factors, such as underlying geology that influences ground and surface water dynamics and the existence of "losing reaches," and human impacts such as water withdrawals for irrigation, channelization and diking, and a lowered groundwater aquifer and associated water tables. The major tributaries of the Salt River in this area – Cottonwood, Dry, and Swift Creeks – are completely allocated for irrigation water, which is delivered through relatively efficient (although aging) pipe infrastructure by the irrigation districts on these systems. They are therefore seasonally dewatered downstream of the respective pipelines' points of diversion. As a result, the upper Salt River watershed below Smoot and above Afton likely has a lowered water table and aquifer and remains dry for most of the year, and there is no viable fisheries habitat in this more than 30-mile section. In addition, channelization and diking in this

section has led to extreme bank and channel instability and erosion, with effects including localized flooding and land loss, and further instability and sedimentation observed downstream within the blue ribbon trout fishery downstream of Afton.

One of the goals of the newly established Salt River Watershed Group would be to build relationships and trust with the irrigation districts in the upper valley and to understand what research needs and potential solutions may be possible in the future to collaboratively address these watershed concerns. A Bureau of Reclamation WaterSMART-funded effort in the Teton River watershed in Idaho, led by the Friends of the Teton River, resulted in a pilot study that worked with irrigators to recharge the groundwater aquifer and increase base flows in the Teton River watershed. This pilot study may be used as an example of a model that could be replicated in the upper Salt River watershed if stakeholders are willing to explore it as an option.



Figure 8: The Salt River upstream of Afton and downstream of Smoot is seasonally dewatered.



Figure 9: A channelized, riprapped reach of the seasonally dry section of the mainstem Salt River does not allow for floodplain access and results in sediment deposition downstream in the blue ribbon section of the fishery.



Figure 10: Downstream of Afton, the Salt River has perennial flows and is a blue ribbon fishery. However, impacts from upstream channelization and dewatering, and agricultural land use and residential development along its banks, result in bank and channel instability and degraded aquatic, riparian, and wetland habitat.

# 4.2.2 Sub-criterion No. B2. Developing Strategies to Address Critical Watershed Needs or Issues

Please describe in detail how the group plans to positively contribute to the management of the issues and needs of the watershed through the proposed activities. Only address those Task Areas that you propose to complete with this grant funding. Please address the following when responding to this sub-criterion:

Task A -Water Group Development: Describe the stakeholder outreach and partnership building that will be conducted and explain how it will contribute to the management of the critical watershed issues and needs?

- If the watershed group will build on previous partnership building efforts, describe these efforts and how the watershed group will expand upon them through this grant.
- Will the group establish relationships with conservation organizations advocating for balanced stewardship and use of public lands, or advocating for increased access to the Department lands for hunting, fishing, and other recreation? If so, how?

#### **Task A -Watershed Group Development**

Central to TU's mission is a belief that bringing all parties to the table results in finding proactive solutions that meet the challenges facing coldwater fisheries. Throughout the West, TU works to protect important habitat, reconnect degraded waterways, and restore trout populations—work that would not be possible without true partnerships between landowners, agencies, non-profits, municipalities, tribes, and other stakeholders. Using this relationship-based approach, TU has completed over 100 river improvement projects in Wyoming since 2007. Together, these projects have invested more than \$25 million in reconnecting and restoring over 1,000 river miles. TU will use this deep experience in partnership building to further the relationships already developed in the Salt River watershed and conduct outreach to and convene affected stakeholders in the watershed to positively contribute to the management of the issues and needs of the watershed.

TU began actively working in the Salt River watershed in 2010 and has been involved in two major partnership building efforts that have led directly to this application to develop a Salt River-specific watershed group. In 2016, TU launched the Snake River Headwaters Home Rivers Initiative (the Initiative), an ambitious effort to restore and protect the headwaters of the Snake River and its fishery with a diverse group of community, landowner, and agency partners. The Initiative's geographic scope includes the Salt River watershed, and since 2016 TU and partners have implemented two large-scale, multi-year restoration projects in the Salt River watershed, on Tincup Creek and Swift Creek, and have cultivated relationships with many stakeholders in the watershed.

In addition, since 2018 TU has led an Upper Snake/Salt Multiagency Project Coordination Meeting attended by the Bridger-Teton National Forest, Caribou-Targhee National Forest, Grand Teton National Park, Jackson Hole Trout Unlimited Chapter, Natural Resources Conservation Service, Protect Our Water Jackson Hole, Star Valley Trout Unlimited Chapter, Snake River Fund, Star Valley Conservation District, Teton Conservation District, United States Geological Survey, and Wyoming Game and Fish Department. This annual meeting's purpose has been to encourage collaboration and communication among agency partners, with an emphasis on fisheries and aquatic projects, as well as research and monitoring related to projects. Through these annual meetings, the need for a separate effort and dedicated watershed group focused specifically on the Salt River watershed was identified.

If awarded funding through this grant opportunity, TU will expand on these partnership building efforts through the outreach activities detailed in Section 3.4, Approach (p. 5), and Section 4.1.1, Sub-Criterion No. A1 – Watershed Group Diversity (p. 6). These activities include hiring a watershed group coordinator, creating a website and marketing materials, attending and hosting local events, advertising in local publications, following up with interested event attendees, convening quarterly SRWG meetings, and conducting stakeholder interviews and on-site visits to observe, understand, and document watershed concerns, needs, and issues.

TU will also solicit input and participation from other NGO groups to provide additional partnerships for SRWG and potential funding for project implementation. TU maintains relationships with Land Trust groups, sportsmen/women groups, and conservation entities with which we partner on coldwater projects throughout the state. TU will promote the involvement of these partners to increase capacity and partnership opportunities.

The Salt River watershed boasts great fishing opportunities and is utilized by local guides and outfitting companies. TU maintains a long history with multiple entities that have partnered in the past on restoration projects and outreach. TU will solicit input and participation from these groups to include recreation stakeholders in the effort. Maintaining a relationship with the recreation groups in the area will provide additional outreach to the community about the objectives of the Working Group.

In addition and as detailed in Section 3.4, Approach (p. 5), a portion of this grant, if awarded, would be used for pre-planning activities for a future stakeholder-driven watershed restoration plan. Once SRWG is established, these activities will include identifying desired elements of a future watershed restoration plan based on stakeholder interviews, material from quarterly meetings, project site visits, and other sources. This research will be used to build and populate an ArcGIS Story Map that presents the information gathered in a public-facing format and that will be updated as the restoration plan process advances. Pre-planning activities will also include identifying research and contractor needs for a future watershed restoration plan and beginning to develop an action plan and budget for this future phase of work.

#### 4.3 Evaluation Criterion C—Implementation & Results (25 points) 4.3.1 Sub-criterion No. C1—Project Implementation

Applicants should describe their plan for implementing the proposed scope of work. Please include an estimated schedule that shows the stages and duration of the proposed work. Applicants may refer to their Technical Proposal if this information is provided there and do not need to provide duplicate information in addressing this sub-criterion if it exists elsewhere in the applicant's proposal. The schedule should include:

- Major tasks (e.g., stakeholder outreach; development of bylaws, a mission statement, and articles of incorporation; or development of a watershed restoration plan and project design)
- Milestones for each task

- Start and end dates for each task and milestone
- Costs for each task

The proposed scope of work is detailed in Section 3.4, Approach (p. 5). The table below describes key activities, milestones, estimated start and end dates for each activity/milestone, and estimated costs. Please note that the proposed schedule and costs will likely depend upon the COVID-19 pandemic and repercussions for the group's ability to hold events, meet in person, or meet via an online platform.

TU is a 501C3 non-profit organization with an annual budget of \$62 million and currently manages over 300 different federal grants. During the past five-year period, TU has received \$55,409,665 of federal direct and pass-through funding. TU is subject to annual audits every year under the OMB's Uniform Guidance for federal grants. TU is a low-risk auditee and has received a clean federal grant audit the past two years with no reportable conditions. The fiscal aspects of the TU-Reclamation partnership are overseen by Matt Renaud, Chief Financial Officer. He oversees 11 staff members who handle a variety of fiscal and administrative tasks for federal grants including the TU-Reclamation partnership. Nationally, approximately 48% of TU's revenue in FY2020 consisted of federal funding and the share in FY2021 is projected to be 44%.

TU has control measures in place to ensure federal funding is managed in adherence to the Uniform Guidance. Each specific grant award is set up as an independent cost center to avoid the co-mingling of funds and a system of checks and balances is used to ensure financial integrity. Accounting staff at both the field and national office levels monitor grant expenditures and invoicing. Training on a variety of compliance topics—procurement, grants administration, cost principles, federal reporting, cost-share, subrecipient management, vendor screening and the grant life cycle—is offered to project managers and support staff on a regular basis. TU's associated policies, procedures and guidance on managing federal funds are assessed at least annually and updated as needed.

Activity	Milestone	Start Date	End Date	Direct Cost
Activity 1: Organizational Development				\$73,020.70
Hire part-time watershed coordinator	Coordinator hired	August 1, 2021	October 1, 2021	
Develop a mission statement, vision statement, and goals	SRWG adopts mission, vision, goals	September 1, 2021	February 28, 2022	
Activity 2: Stakeholder & Community Outreach				\$10,000
Establish a communications and outreach plan	Website created Marketing materials created	August 1, 2021	January 31, 2022	

	GIS Story Map developed			
Establish a community presence	Attended relevant local events Hold river clean- up event with Star Valley TU Booked advertising for SRWG meetings	August 1, 2021	July 31, 2023	
Conduct stakeholder outreach	Meet with interested stakeholders Hosted tours of recent partnership projects	August 1, 2021	July 31, 2023	
Establish regular SRWG meetings	Hold quarterly meetings	October 1, 2021	July 31, 2023	
Activity 3: Stakeholder Interviews & Background Research				\$10,000
Undertake background research actions to determine previous planning efforts and models for watershed restoration plans	Relevant in- progress and previous planning efforts identified Example watershed restoration plans identified Information made available to SRWG members	September 1, 2021	February 28, 2022	
Conduct stakeholder interviews and on-site visits to better understand watershed concerns, needs, and issues	Interviews with affected stakeholders conducted 4 on-site visits organized and attended Findings from interviews and visits made available to SRWG members	September 1, 2021	February 28, 2022	

Activity 4: Pre- Planning for Future Watershed Restoration Plan				\$10,000
Identify desired elements of a future watershed restoration plan	Preliminary desired elements identified and outlined	September 1, 2021	July 31, 2023	
Identify research and contractor needs for a future watershed restoration plan and begin to develop action plan and budget	Research and contractor needs identified Action plan, budget, and potential application for a second CWMP grant to complete activities under Task B and Task C developed	September 1, 2021	July 31, 2023	

#### **4.3.2 Sub-criterion No. C2—Building on Relevant Federal, State, or Regional Planning Efforts** Please describe how the proposed activities of the watershed group will complement or meet the goals of relevant Federal, state or regional planning efforts.

An important objective of establishing the new Salt River Watershed Group will be to research and build upon relevant federal, state, and regional planning efforts to help inform and guide SRWG's efforts and help identify where additional future planning is needed. The watershed coordinator will work with partners and stakeholders to better understand how SRWG's activities may complement the following plans and, particularly, how a future watershed restoration plan developed by the group can build upon these plans.

# Bridger-Teton National Forest Land and Resource Management Plan (1990) and Revised Forest Plan for the Caribou National Forest (2003):

National Forests are governed by management plans that set goals and guidelines for resource management, protection, and use. As the National Forests represent the majority of land ownership in the upper elevations of the watershed, and representatives from both the Bridger-Teton and Caribou-Targhee National Forests plan to be a part of the new watershed group, it is expected that the proposed activities of SRWG are likely to both complement and meet the watershed, fisheries, and aquatic related goals of these Forests' respective management plans, including aquatic organism passage, aquatic habitat, sedimentation, and watershed health.

#### Trout Unlimited Salt River Fish Barrier Assessment (2012):

This study was commissioned by TU to better understand potential barriers to fish passage in the Salt River watershed, including road crossings, diversions, and other channel-spanning structures. The inventoried potential barriers identify irrigation diversions and other structures

that not only may impede native fish migration and access to important habitat, but may also alter or degrade stream and riparian function. The goal of the study was to identify where opportunities may exist to upgrade irrigation infrastructure while also benefitting fish passage. It is expected that SRWG activities will lay the groundwork for future projects that meet the goals of this study.

# Wyoming Department of Environmental Quality Salt River Watershed, Wyoming Water Quality Assessment and E. coli TMDLs and E. coli Implementation Plan (2015):

The *E. coli* TMDL assessment and plan by the Wyoming Department of Environmental Quality, a key proposed SRWG partner, identified a 7.5 mile section of the lower Salt River and the section of Stump Creek from its confluence upstream to the Idaho border that does not meet water quality standards for *E. coli*. Restoration strategies include addressing human, recreation, livestock, and pet sources to reduce overall pollution loads. It is expected that SRWG activities will complement and help meet the goals of these plans. In addition, we expect that the involvement of the Wyoming DEQ may lead to additional study of water quality issues and pollutant levels in the Salt River watershed, including elevated sediment, temperature, and nutrients.

#### Wyoming Game and Fish Department Statewide Habitat Plan (2020):

The Statewide Habitat Plan of the Wyoming Game and Fish Department, a key proposed SRWG partner, identifies and outlines a strategy for meeting 3 statewide goals: 1) Conserve and protect crucial aquatic and terrestrial wildlife habitats; 2) Restore aquatic and terrestrial wildlife habitats; and 3) Conserve, enhance, and protect fish and wildlife migrations. Within the aquatic habitat department, several habitat and fishery issues have been identified for the Salt River watershed including altered and degraded river form and function as a result of human development and agricultural impacts on hydrology and water use; conversion of wetlands and riparian areas; removal of willows and other woody riparian vegetation; destabilized streambanks; degraded water quality; and lower quality trout habitat. It also manages the Salt River below Afton as a blue ribbon trout fishery celebrated for its native Snake River cutthroat trout and non-native brown trout populations. It is expected that SRWG activities will complement and help meet the goals of these plans by fostering collaboration and communication that leads to future on-the-ground projects to address these identified human impacts.

#### **Future Planning Efforts:**

*Natural Resources Conservation Service Regional Conservation Partnership Program:* TU and several key proposed SRWG partners are interested in applying for a future NRCS Regional Conservation Partnership Program grant focused on watershed health, water quality, bank and channel stabilization, and fish habitat and passage. It is expected that SRWG activities would likely identify projects and watershed needs, and foster collaboration among diverse stakeholders, that would help to lay the groundwork for an RCPP proposal and make it more competitive in the future.

Wyoming Water Development Commission Level 1 Watershed Study for the Salt River: The Star Valley Conservation District, a key proposed SRWG partner, is interested in partnering with the Wyoming Water Development Commission to sponsor a Level 1 Watershed Study for the Salt River. Typically, these watershed studies are focused on understanding watershed condition and function and identifying projects eligible for the WWDC's Small Water Projects Program, such as small water storage, pipelines, wells, and irrigation infrastructure projects. While no such plan exists yet, it is expected that SRWG activities would complement the goals of a future WWDC Level 1 Watershed Study by identifying potential watershed improvement projects.

# 4.4 Evaluation Criterion D—Department of the Interior & Bureau of Reclamation Priorities (10 points)

- 1. Creating a conservation stewardship legacy second only to Teddy Roosevelt
  - a. Utilize science to identify best practices to manage land and water resources and adapt to changes in the environment;
  - b. Examine land use planning processes and land use designations that govern public use and access;
  - c. Revise and streamline the environmental and regulatory review process while maintaining environmental standards.
  - d. Review DOI water storage, transportation, and distribution systems to identify opportunities to resolve conflicts and expand capacity;
  - e. Foster relationships with conservation organizations advocating for balanced stewardship and use of public lands;
  - f. Identify and implement initiatives to expand access to DOI lands for hunting and fishing;
  - g. Shift the balance towards providing greater public access to public lands over restrictions to access.

Conservation stewardship is the heart of Trout Unlimited's work. Founded in Michigan in 1959, TU today is a national non-profit organization with 300,000 members and supporters dedicated to conserving, protecting, and restoring North America's coldwater fisheries and their watersheds. Our staff and volunteers work from coast to coast to protect, reconnect, restore and sustain trout and salmon habitat on behalf of today's anglers and coming generations of sportsmen and women who value the connection between healthy, intact habitat, thriving local communities, and angling opportunities. Much of this work occurs in partnership with federal agencies on public lands where TU works with agencies and affected stakeholders to advocate for balanced stewardship and use of public lands.

TU's conservation strategy embraces the stewardship legacy of Teddy Roosevelt by using the best science to drive conservation priorities, connecting with passionate anglers and other stakeholders who want to give back to the resources they value so much, and engaging TU members and stakeholders in conservation through communication and outreach. TU's Angler Conservation Program has a strong track record of public lands conservation achievements attained through educating, organizing, and mobilizing local grassroots, hunters, and anglers.

TU will bring this mission and experience to the Salt River Watershed Group to convene diverse stakeholders, assess watershed needs, and collaboratively work toward solutions that benefit Salt River watershed residents, state and federal agencies, farmers, ranchers, and the environment. As the formation of SRWG is being led by a conservation organization, balanced stewardship and use of public lands is the very center of the proposed project. Through identifying watershed

concerns, convening affected stakeholders in the watershed, implementing a communications strategy that provides watershed information and opportunities to engage to the local community, and working with public lands agencies, SRWG will help ensure a conservation legacy second only to Teddy Roosevelt.

- 3. Restoring trust with local communities
  - a. Be a better neighbor with those closest to our resources by improving dialogue and relationships with persons and entities bordering our lands;
  - b. Expand the lines of communication with Governors, state natural resource offices, Fish and Wildlife offices, water authorities, county commissioners, Tribes, and local communities.

The formation of SRWG will help the Department of the Interior restore trust with local communities through the strong relationships and partnerships TU has built in the watershed and that will continue to grow with SRWG's development. The Salt River Watershed Group plans to build on these partnerships by involving federal agencies, state agencies, local government, private landowners, recreation groups, and community members. Along with the Bureau of Reclamation, the Bridger-Teton and Caribou-Targhee National Forests, NRCS, Wyoming Game & Fish, Wyoming DEQ, local irrigation districts, the Star Valley Conservation District, Star Valley Trout Unlimited, and many other groups and interests have expressed interest in or will be invited to be involved in the SRWG, thereby increasing communication and building relationships among the watershed's diverse stakeholders.

TU has a proven track record of finding and empowering long-term stewards from affected communities. This deep experience will be put to use with SRWG by attending public events, hosting a river clean up, advertising in local papers, and holding meetings that are open to all interested parties. These activities are designed to ensure that those who participate feel heard, that lines of communication between participants are opened, and that participants feel their input is valued. Convening all affected stakeholders in such a fashion helps create and restore trust among all participants, including the Department of the Interior and the communities and interests who interact with public lands.

## 5. Project Budget

5.1 Budget Proposal

## **Total Project Cost Table**

SOURCE	AMOUNT
Costs to be reimbursed with the requested Federal	
funding	\$98,131.91
Costs to be paid by the applicant	\$ 19,043.83
Value of third-party contributions	\$
TOTAL PROJECT COST	\$ 117,175.74

### **Budget Proposal**

Budget Item Description	\$/Unit	Quantity	Unit	Total Cost
Salaries and Wages				
TU Program Director - In-Kind - 2 years	\$33.50	320	Hours	\$10,720.00
TU GIS Support - In-Kind - 2 years	\$33.50	20	Hours	\$670.00
TU Watershed Coordinator - 2 years	\$24.00	2080	Hours	\$49,920.00
Fringe Benefits				
TU Program Director - In-Kind (47%)	47.00%	\$10,720.00	Percentage	\$5,038.40
TU GIS Support - In-Kind	47.00%	\$670.00	Percentage	\$314.90
TU Watershed Coordinator (47%)	47.00%	\$49,920.00	Percentage	\$23,462.40
Travel				
Local travel (meetings, outreach, site visits) -				
2 years	\$0.56	5,134	Miles	\$2,875.00
Supplies and Materials				
Printer and office supplies	\$50.00	24	Months	\$1,200.00
Meeting and event supplies	\$250.00	8	Meetings	\$2,000.00
Marketing materials	\$2,000.00	1	Lump Sum	\$2,000.00
Contractual / Construction				
Advertising in Star Valley Independent	\$270.00	16	Ads	\$4,320.00
Other				\$0.00
Website domain, hosting, template	\$500.00	1	Lump sum	\$500.00
Office desk at Star Valley Conservation				
District - in-kind	\$0.00	24	Months	\$0.00
Total Direct Costs				\$103,020.70
Indirect Costs				
Predetermined-NICRA	13.74%	103020.7		\$14,155.04
Total Estimated Project Costs				\$117,175.74
Total Estimated Project Costs - TU In-Kind				\$19,043.83
Total Estimated Project Costs - BOR CWMP				\$98,131.91

#### 5.2 Budget Narrative

#### **Salaries and Wages**

Funds from this grant will be used for TU to hire a Watershed Coordinator to lead efforts for the development of the Salt River Watershed Group. This is anticipated to be a .5FTE. TU is exploring whether the position could become a full time FTE through the development and funding of a workplan committed to restoration project development and implementation as well as the responsibilities listed below for the development of SRWG.

The Watershed Coordinator responsibilities will include (but not be limited to):

- Establishing SRWG including the development of a mission, vision, membership and rules for the group
- Facilitating group meetings
- Interviewing members and other potential SRWG members for input and participation
- Produce and maintain outreach and web based content including the Story Map and other marketing materials.
- Attend local events to provide additional outreach including:
  - February: Thayne Snow Days
  - May: Star Valley Health & Safety Expo
  - June: Wyoming Free Fishing Day
  - June: Alpine Mountain Days
  - o June: Afton Freedom Festival
  - August: Lincoln County Fair

Salaries and wages also include costs associated with the participation of TU's Program Director and GIS Support staff in the development of SRWG. Contemplated costs include management of the CWMP grant and oversite of outreach, communications, project development and management and supervision of the Watershed Coordinator. TU will provide GIS support including the development of a Story Map for the Salt River Watershed, similar to what is used for TU's Upper Snake River Home River Initiative (see: https://arcg.is/DPvyy) and the Willwood Working Grout (see: https://arcg.is/0PmPvS). As noted in the budget, this time will be an in-kind commitment from TU towards the cost of the project.

#### **Fringe Benefits**

TU's current fringe benefit is 47% and is included in the budget. Fringe Benefits for TU's Program Director and GIS Support will be an in-kind contribution towards the cost of the project.

#### Travel

Travel costs are associated with the Watershed Coordinator position. The majority of the travel will occur throughout the Salt River Watershed to visit with potential stakeholders and SRWG members. Travel will also include project site visits and multi agency meetings.

Attendance will be expected at meetings that could affect SRWG development including:

- quarterly SRWG meetings
- the State of Wyoming lead Snake River Agency Meetings,
- the Upper Snake Collaborative meeting in Driggs, ID 2-4 times a year,

- the Upper Snake / Salt Multiagency Coordination Meeting
- Conservation District and Irrigation District meetings as needed.

#### **Supplies and Materials**

Funds from the grant will be used for general office and marketing supplies including brochures, business cards, rack cards, stickers, banner, etc.

Office space for the watershed coordinator will be provided by the Star Valley Conservation District without cost.

#### **Contractual/Construction**

Funds will also be used for advertising costs which could include advertisements in the Star Valley Independent and other local resources.

#### Other

Grant funds will be used for costs associated with the domain, hosting and template for the SRWG website.

## 6. Environmental & Cultural Resources Compliance

As this project is designed to develop a new watershed group and undertake planning activities, no environmental compliance will be necessary for project implementation.

## 7. Required Permits or Approvals

No known permits or approvals are necessary to implement the watershed group development and planning activities proposed in this application. If permits or approvals are needed for meetings and/or events, TU will secure the required permits/approvals.

### 8. Letters of Support

Please see Appendix A on p. 30 for letters of support from the following partners:

Star Valley Conservation District Lincoln County Planning Office Wyoming Department of Environmental Quality Wyoming Game & Fish Department Bridger-Teton National Forest Caribou-Targhee National Forest US Fish & Wildlife Service Partners for Fish & Wildlife Program

## 9. Official Resolution

The official resolution will be submitted immediately following Trout Unlimited's next board meeting on February 5, 2021.

Appendix A: Letters of Support

January 13, 2020

Star Valley Conservation District PO Box 216 61 E. 5<sup>th</sup> Ave. Afton, WY 83110

Bureau of Reclamation Financial Assistance Operations Attn: Mr. Edmund Weakland P.O. Box 25007, MS 84-27815 Denver, CO 80225

To: Bureau of Reclamation

RE: WaterSMART Cooperative Watershed Management Program Grant

On behalf of the Star Valley Conservation District (SVCD) I would like to submit this letter of strong support for Trout Unlimited's (TU) WaterSMART Cooperative Watershed Management Program Grant application. The project is highly aligned with our conservation district's mission to pursue the conservation, wise use, and protection of Star Valley's natural resources, and we look forward to participating as a project partner. We are supportive of the project's goals to develop a watershed coordination group for the Salt River in Lincoln County, Wyoming. We commend the project's collaborative approach of working with multiple agencies including the Natural Resources Conservation Service, Wyoming Game and Fish Department, and US Fish and Wildlife Service, Lincoln County Planning Office, Trout Unlimited, Star Valley Conservation District and local landowners to address persistent sediment, bank stability, and fish habitat issues on Salt River.

Sincerely,

Rollin Gardner Chairman Star Valley Conservation District

January 13, 2020

Lincoln County Planning Office 421 Jefferson Street, Suite 701 61 E. 5<sup>th</sup> Ave. Afton, WY 83110

Bureau of Reclamation Financial Assistance Operations Attn: Mr. Edmund Weakland P.O. Box 25007, MS 84-27815 Denver, CO 80225

To: Bureau of Reclamation RE: WaterSMART Cooperative Watershed Management Program Grant

On behalf of the Lincoln County Planning Office, I would like to submit this letter of strong support for Trout Unlimited's (TU) WaterSMART Cooperative Watershed Management Program Grant application. We are supportive of the project's goals to develop a watershed coordination group for the Salt River in Lincoln County, Wyoming. We commend the project's collaborative approach of working with multiple agencies including the Natural Resources Conservation Service, Wyoming Game and Fish Department, and US Fish and Wildlife Service, Trout Unlimited, Star Valley Conservation District and local landowners to address persistent sediment, bank stability, and fish habitat issues on Salt River.

Sincerely,

Steve Johnson Lincoln County Planning Director



# **Department of Environmental Quality**

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.





Todd Parfitt, Director

January 19, 2021

Bureau of Reclamation Water Resources and Planning Office Attn: Ms. Avra Morgan Mail Code: 84-51000 P.O. Box 25007 Denver, CO 80225

Sent electronically via email to <u>Leslie.Steen@tu.org</u> and <u>Sara.Porterfield@tu.org</u>.

Dear Ms. Avra Morgan,

I write on behalf of the Wyoming Department of Environmental Quality (DEQ) Nonpoint Source Program (NPS) in support of Trout Unlimited's (TU) 2021 Cooperative Watershed Management grant proposal to the Bureau of Reclamation to assist with planning efforts in the Salt River watershed. TU has a proven track record with the NPS program, successfully sponsoring and participating in several restoration projects funded in part through Clean Water Act Sections 319 and 205(j) funds administered through the NPS program. TU is an important and active stakeholder within Wyoming's watersheds, and their commitment to collaboration with a diverse array of stakeholders within the state will make them a great leader on this proposed project.

TU has done an excellent job at identifying water quality needs within the state and responsibly managing funds to address those needs. As an example, TU is currently sponsoring a restoration project on lower Swift Creek, a major tributary to the Salt River, through the NPS Program. This project implements best management practices to address sedimentation, bank stability, and agricultural impacts in the stream and is a critical step of the broader vision to address water quality/fisheries issues in the larger Salt River watershed. TU's proactive approach in the watershed and their recognition of the value of collecting data to measure improvement for their projects further demonstrates their ability to provide positive change for water quality in the Salt River.

The data that would be collected in relation to this proposed project would help stakeholders, including DEQ, better understand and address the impairments in the entire watershed. In the event this proposal is funded, we anticipate that DEQ's role in the project will include 1) actively participating in the watershed group and 2) providing input and support in the development of a watershed plan for the Salt River.

200 West 17th Street, Cheyenne, WY 82002 · http://deq.wyoming.gov · Fax (307)635-1784

We appreciate the opportunity to provide our support for Trout Unlimited in their proposal for this grant. Please feel free to contact me with any questions or for additional information on their past and current projects with the NPS Program.

Regards,

Ult ! Jeffers

Alex Jeffers Nonpoint Source Program Coordinator Wyoming Department of Environmental Quality Water Quality Division, Watershed Protection 200 W. 17th St. Garden Level Cheyenne, WY 82002 307-777-6733 | alexandria.jeffers@wyo.gov



## WYOMING GAME AND FISH DEPARTMENT

5400 Bishop Blvd. Cheyenne, WY 82006 Phone: (307) 777-4600 Fax: (307) 777-4699 wgfd.wyo.gov GOVERNOR MARK GORDON

DIRECTOR BRIAN R. NESVIK

COMMISSIONERS PETER J. DUBE – President PATRICK CRANK – Vice President RALPH BROKAW GAY LYNN BYRD RICHARD LADWIG DAVID RAEL MIKE SCHMID

January 11, 2021

Bureau of Reclamation Financial Assistance Operations Attn: Mr. Edmund Weakland P.O. box 25007 Denver, CO 80225

Dear Mr. Weakland, CWMP Application Review Committee,

The Wyoming Game and Fish Department (Department) supports Trout Unlimited's efforts to convene and coordinate a Salt River Watershed Group. The Salt River is an important, blue ribbon sport fishery for native Snake River Cutthroat Trout and wild brown trout. The river is not stocked, meaning that fish are dependent upon the maintenance of high quality, intact habitats to continue to maintain healthy, robust populations. The Salt River corridor is highlighted as an important restoration area in the Department's Statewide Habitat Plan, for its high resource value and great potential to see gains through targeted intervention (https://wgfd.wyo.gov/getmedia/8ba62756-6d1c-4257-8644-82383dfa605a/SHP2020\_Final). What is more, the Department maintains sixteen different public access easements along the Salt River corridor to provide opportunities for river access to float, fish and waterfowl hunt. Providing access to and maintenance of high quality wildlife and fisheries resources for future generations to experience and enjoy is the Department's mission and priority. Coordination with NGO's, County, State and Federal government entities and landowners is critical to achieving this goal.

While the Salt River undoubtedly provides great opportunities to anglers, hunters, floaters and irrigators, it would be misleading to imply that the resource is entirely intact. Decades of land use and manipulation – channelization, willow removal, water diversion and on channel gravel extraction – have reduced the river's ability to route sediment, maintain channel bed and banks, and support native riparian vegetation. Water table lowering associated with bank erosion and loss of riparian function, and irrigation withdrawals exacerbate naturally-porous geology, rendering sections of mainstem and tributaries seasonally intermittent. Coordinated watershed restoration, strategic irrigation planning and infrastructure modernization will help address these ecological deficits. The Salt River corridor is largely privately-owned. Therefore, a stakeholder or community group, which is comprised of private landowners and actively reaches out to neighbors, will be integral to the implementation of watershed-scale coordination.

"Conserving Wildlife - Serving People"

Salt River Watershed Group January 11, 2021 Page 2

On behalf of the Department, I thank you for your consideration of the Salt River Watershed Group's proposal. I am hopeful for the future of this group and look forward to being an active participant, for the benefit of Wyoming's anglers and their resource.

Sincerely,

here

Anna Senecal Jackson Region Aquatic Habitat Biologist

AS/as

Cc: Sara Porterfield, Water Policy Associate, Trout Unlimited File



Agriculture

Forest **United States Department of** Service **Bridger-Teton** National Forest 340 N. Cache **PO Box 1888** Jackson, WY 83001-1888

File Code: 2520 Date: January 11, 2020

Bureau of Reclamation Water Resources and Planning Office Attn: Ms. Avra Morgan Mail Code: 84-51000 P.O. Box 25007 Denver, CO 80225

Dear Ms. Morgan:

The Bridger-Teton National Forest (BTNF) supports Trout Unlimited's funding request to start a Watershed Planning Group for the Salt River Watershed. Trout Unlimited has been an incredible partner for stewarding stream and watershed restoration projects on the BTNF. With their help, the BTNF has been able to successfully implement projects that could not have happened without that support. Projects that include culvert replacement for fish passage, bridge installations, and riparian habitat enhancement projects all of which that have provided improvements to native fish populations, habitat reconnection, and water quality.

With Trout Unlimited's support and leadership within the community, projects are already taking place in the Salt River Watershed, that have begun to benefit both the native fisheries and stream networks. To have the opportunity to continue to focus on the Salt River Watershed with the many potential partners within the Star Valley Community would be a long-term benefit for both public and private lands. The BTNF has a strong interest in and support of this planning group and looks forward to being a partner to the exciting restoration opportunities that it will bring.

Sincerely,

Trevlyn

Digitally signed by **Trevlyn Robertson** Date: 2021.01.11 Robertson 16:03:20 -07'00'

Trevlyn Robertson South Zone Hydrologist

cc: Leslie Steen, Trout Unlimited NW Planning Director



Printed on Recycled Paper

**Caribou-Targhee National Forest HQ** 



es Forest t of Service 1405 Hollipark Drive Idaho Falls, ID 83401 208-557-5900 Fax: 208-557-5827

 File Code:
 2600

 Date:
 January 13, 2021

Bureau of Reclamation Water Resources and Planning Office Attn: Ms. Avra Morgan Mail Code: 84-51000 P.O. Box 25007 Denver, CO 80225

Re: Application by Trout Unlimited to form a Salt River Watershed Group in the Greater Star Valley Area, Wyoming

Dear Ms. Morgan,

I am writing in support of Trout Unlimited's (TU) desire to form a Salt River Watershed Work Group. The Forest will participate in this group as it will continue the significant work we have already completed in the drainage. The Salt River drainage is centered along the Wyoming Idaho state line with the lowlands privately owned and dominated by agricultural and livestock management. The uplands are predominately federally managed Forest Service lands. A watershed group would be a critical step forward in continuing beneficial change in an extremely complex setting.

The Caribou-Targhee National Forest contains the headwaters of the westside Salt River tributaries. Of the major Forest drainages to the Salt River the Forest has completed restoration in the following tributaries: Jackknife, Tincup, and Crow creeks. There is ongoing restoration being planned in the Tincup and Jackknife drainages. The Caribou-Targhee National Forest has identified priority watersheds within the Salt River as part of a Nationwide Forest Service effort following the National Watershed Condition Framework aimed at improving watershed condition<sup>1</sup>. The Jackknife Creek watershed has been one of those watersheds.

The reason for our focus in the Salt River area is due to the intact native fish populations that include Yellowstone cutthroat trout and northern leatherside chub. Non-native species occur sporadically on Forest and there is a need for a coordinated management of non-native species in the Salt River proper. Brown trout and rainbow trout are increasing in certain areas of the Salt River and their needs to be a continued management emphasis to control expansion.

Development of a working group would be valuable in the Salt River to guide restoration priorities and solicit coordination and funding in the bi-state area.

The Forest Service has partnered with TU over the past 20 years in support of stream restoration objectives. TU brings an ability to work with private landowners that is advantageous. We have



<sup>&</sup>lt;sup>1</sup> https://www.fs.fed.us/naturalresources/watershed/condition\_framework.shtml

found these partnerships to be very beneficial and rewarding as we both strive to improve watershed conditions.

If you have any questions regarding our support I can be reached at (208)-557-5900 or you may contact Lee Mabey, Forest Fisheries Biologist at (208)557-5784 or email: <u>lee.mabey@usda.gov</u>

Sincerely,

MEL BOLLING Forest Supervisor



## United States Department of the Interior

Fish and Wildlife Service Lander Fish & Wildlife Management Office Partners for Wildlife Branch 170 North First Street Lander, WY 82520 307/332-8719 Fax:307/332-9857 Internet: mark j hogan@fws.gov



January 13, 2021

Bureau of Reclamation Water Resources and Planning Office Attn: Ms. Avra Morgan Mail Code: 84-51000 P.O. Box 25007 Denver, CO 80225

RE: Bureau of Reclamation WaterSMART Cooperative Watershed Management Program Planning Grant Proposal

Dear Ms. Morgan,

I am writing to express the U.S. Fish and Wildlife Service's Wyoming Partners for Fish and Wildlife Program's (PFW) support for the Trout Unlimited grant proposal to the Bureau of Reclamation's WaterSMART Cooperative Watershed Management Program.

The Partners for Fish and Wildlife Program is the voluntary private lands habitat restoration program of the U.S. Fish and Wildlife Service. We share many conservation priorities with Trout Unlimited and other partners in the Salt River watershed, such as habitat for native fish and other species dependent upon wetland and riparian habitats. We also recognize the collaborative approach to conservation as conceived by the proposed Salt River Watershed Group is critical for future conservation success. The southwest Wyoming PFW Program biologist will continue to work with private landowners, Trout Unlimited, and other partners to further conservation goals in the Salt River watershed and will be a willing participant in the watershed group.

We look forward to the continued partnership.

Sincerely,

MARK HOGAN Digitally signed by MARK HOGAN Date: 2021.01.14 09:53:46 -07'00'

Mark Hogan WY PFW Coordinator